

NEW FOOD PLANTS FOR SOME QUEENSLAND BUTTERFLIES

Garry Sankowsky

P.O. Box 210, Tolga, Qld, 4882

Abstract

New host plant records are given for *Protographium leosthenes leosthenes* (Doubleday), *Graphium sarpedon choredon* (C. and R. Felder), *Graphium eurypylus lycaon* (C. and R. Felder), *Graphium agamemnon ligatum* (Rothschild), *Graphium aristus parmatum* (Gray), *Eleppone anactus* (W.S. Macleay), *Priniceps aegeus aegeus* (Donovan), *P. fuscus capaneus* (Westwood), *P. canopus canopus* (Westwood), *P. ambrax egipius* (Miskin), *Papilio ulysses joesa* Butler, *Cressida cressida cressida* (Fabricius), *Atrophaneura polydorus queenslandicus* (Rothschild), *Ornithoptera euphorion* (Gray), *Catopsilia pyranthe crokera* (W.S. Macleay), *Danaus affinis affinis* (Fabricius), *Tirumala hamata hamata* (W.S. Macleay), *Euploea sylvester sylvester* (Fabricius), *Polyura sempronius sempronius* (Fabricius), *Phaedyma shepherdii shepherdii* (Moore), *Yoma sabina parva* (Butler), *Junonia orithya albicincta* Butler, *Cethosia cydippe chrysippe* (Fabricius), *Vindula arsinoe ada* (M.R. Butler), *Vagrans egista propinqua* (Miskin), *Cupha prosopoe prosopoe* (Fabricius), *Hypochrysops ignitus chrysonotus* Grose-Smith, *Deudorix epijarbas dido* Waterhouse, *Anthene lycaenoides godeffroyi* (Semper), *Jamides aleuas coelestis* (Miskin) and *Zizula hylax attenuata* (T.P. Lucas). Distributions, including notes on habitats are given for some host plants and new life history notes are recorded for some butterfly species.

Introduction

Lists of food plants for Australian butterflies have been given or summarised by Common and Waterhouse (1972, 1981) and Ackery and Vane-Wright (1984). The author has previously listed numerous butterfly food plants that occur in rainforest (Sankowsky 1975, 1978) and over the past 10 years has observed the use of other (mostly rainforest) plants as hosts.

Unless otherwise stated ova or larvae were found on the plants listed and raised to adults on the same species. Records from Tolga were obtained from cultivated plants in the author's arboretum, all other records were from wild plants.

Abbreviations

(BRI) Queensland Herbarium, Indooroopilly; (QRS) C.S.I.R.O. Herbarium, Atherton Qld; R.F.K. C.S.I.R.O. computerised key for identification of rainforest plants of northern Australia. * Exotic species of plants.

PAPILIONIDAE

Protographium leosthenes leosthenes (Doubleday)

Desmos wardianus (Bailey) Jessup (Annonaceae). Weipa, Dec. 1986. Common in the monsoonal rainforests of Weipa and Bamaga. Both larvae and a pupal case were observed on the vine.

Melodorum uhrii F. Muell (Annonaceae). Mt Tamborine, Dec. 1979. Occurs in rainforest from about Ingham to Cooktown. This host would rarely be used naturally as it occurs in wetter rainforest than *P. leosthenes*

usually frequents, but in captivity the adults oviposited freely on the vine and larvae developed at the normal rate.

Graphium sarpedon choredon (C. and R. Felder)

Beilschmiedia obtusifolia (F. Muell. ex Meissn.) F. Muell. (Lauraceae). Tolga, Jan. 1989. A common tree found in both moist and wet rainforest from Cape York to Sydney.

Cryptocarya cinnamomifolia Benth. (Lauraceae). Tolga, Dec. 1983. Tree found only in high altitude very wet rainforest from Cooktown to Tully River.

Cryptocarya mackinnoniana F. Muell. (Lauraceae). Tolga, Mar. 1989. A common tree in wet tropical rainforest from Mt Tozer to Mt Dryander.

Cryptocarya murrayi F. Muell. (Lauraceae). Tolga, Jan. 1989. A tree found mostly in lowland rainforest from Cooktown to Mackay.

Endiandra impressicosta Allen (Lauraceae). Tolga, Dec. 1983. A tree found in lowland rainforest from Cape York to Tully.

Litsea ferruginea (R.Br.) Benth. & J.D. Hook (Lauraceae). Tolga, Jan. 1989. A small tree found mostly on rainforest margins near the coast from Cairns to Cooktown.

Litsea glutinosa (Lour.) C.B. Robinson (Lauraceae). Weipa, Dec. 1986. Commonly found in vine thickets and dry monsoonal rainforest of Cape York Peninsula, the Northern Territory and Western Australia.

Litsea leefeana (F. Muell.) Merr. (Lauraceae). Tolga, Jan. 1984. Tree found only in wet to very wet rainforest from Cooktown to northern New South Wales.

Neolitsea australiensis Kosterm. (Lauraceae). Burleigh Heads, Mar. 1980. Common in both wet and dry rainforests of Queensland and the Northern Territory.

Graphium eurypylus lycaon (C. and R. Felder)

Artabotrys sp. (Annonaceae). Tolga, Jan. 1989. A large vine found only in rainforest along the Claudie River.

Desmos sp. (Voucher: Sankowsky 483 (BRI)) (Annonaceae). Tolga, Jan. 1989. An uncommon vine found from Mossman Gorge to Bloomfield and along the Claudie River.

Melodorum sp. (Voucher: Sankowsky 532 (BRI)) (Annonaceae). Tolga, Jan. 1989. A large vine which is very similar to *Rauwenhoffia leichhardtii*. It is common along the Wenlock River and in the Weipa area.

Melodorum sp. (Voucher: Sankowsky 625 (BRI)) (Annonaceae). Tolga, Jan. 1989. A large vine found only at Topaz and Woopen Creek.

Melodorum sp. (Voucher: Sankowsky 770 (BRI)) (Annonaceae). Tolga, Jan. 1989. A large vine commonly found in dry monsoonal rainforest north of Coen.

Melodorum sp. (Voucher: Sankowsky 822 (BRI)) (Annonaceae). Tolga, Dec. 1988. A rare vine found only at Baker's Blue Hills and near Coen.

Polyalthia sp. (Voucher: Sankowsky 292 (BRI)) (Annonaceae). Tolga, Dec. 1988. A large tree which has a fairly restricted distribution, found only from Pine Ck, E of Cairns to Bellenden Ker.

Polyalthia australis (Benth.) Jessup (Annonaceae). Tolga, Dec. 1988. Medium sized tree, commonly found in monsoonal rainforest on Cape York Peninsula, the Northern Territory and Western Australia. The southern limit is the Mulgrave River near Cairns.

Uvaria membranacea Benth. (Annonaceae). Sweet Ck, N of Cairns, Dec. 1987. A large vine found in moist monsoonal rainforest north of Cairns. It is common at Bamaga but does not occur at Weipa.

Uvaria rufa Blume (Annonaceae). Tolga, Dec. 1988. A large vine found in dry monsoonal rainforest north of Coen. It is a common vine at Weipa.

Graphium agamemnon ligatum (Rothschild)

Ancana stenopetala F. Muell. (Annonaceae). Tolga, Mar. 1984. A small shrub found only in south-eastern Queensland outside of the range of this butterfly (Common and Waterhouse 1981) and so would not normally be a host.

Cyathostemma micranthum (A.Dc.) J. Sinclair (Annonaceae). Tolga, Jan. 1989. A large vine found in moist to wet monsoonal rainforest north of Cooktown.

Desmos goezeanus (F. Muell.) Jessup (Annonaceae). Tolga, Feb. 1984. A large vine found in wet rainforest between Ingham and Cooktown.

Desmos sp. (Voucher: Sankowsky 483 (BRI)) (Annonaceae). Bloomfield, Dec. 1984.

Fitzalania heteropetala (F.Muell.) F.Muell.(Annonaceae). Tolga, Feb. 1984. A small shrub found in moist to dry (mostly coastal) rainforest from Proserpine to about Maryborough. It may be the host plant of *G. aristus* at Yeppoon.

Goniiothalamus australis Jessup (Annonaceae). Topaz, Dec. 1984. A small tree which is restricted mostly to high altitude very wet rainforest from The Big Tableland (near Cooktown) to about Millaa Millaa.

Haplostichanthus johnsonii F. Muell. (Annonaceae). Woopen Creek, May 1986. A small shrub found only from the eastern base of Mt Bartle Frere to the Johnston River.

Haplostichanthus sp. (Voucher: Sankowsky 221 (BRI)) (Annonaceae). Tolga, Feb. 1984. A very common small shrub in lowland rainforest from Mossman to Bloomfield.

Haplostichanthus sp. (Voucher: Sankowsky 342 (BRI)) (Annonaceae). Tolga, Feb. 1984. A common small tree in lowland rainforest between Cairns and Ingham.

Haplostichanthus sp. (Voucher: Sankowsky 402 (BRI)) (Annonaceae). Tolga, Feb. 1984. A small tree only occurring between the Mulgrave and Johnston Rivers.

Melodorum sp. (Voucher: Sankowsky 625 (BRI)) (Annonaceae). Topaz, Aug. 1984.

Melodorum sp. (Voucher: Sankowsky 822 (BRI)) (Annonaceae). Tolga, Feb. 1985.

Miliusa brahei (F.Muell.) Jessup (Annonaceae). Four Mile Beach, Port Douglas, Nov. 1983. A small tree common in beach or monsoonal

rainforest on the east coast north of Proserpine. Ova and larvae were found on juvenile plants, which appear to be the only situation where *G. agamemnon* ova are found.

Miliusa traceyi Jessup (Annonaceae). Tolga, Feb. 1989. A small deciduous tree found only in dry monsoonal rainforest on Cape York Peninsula north of Musgrave. It is interesting to note that the author has not been able to induce any *Graphium* larvae to feed on *Miliusa horsfieldii* (Benn.) Baillon ex Pierre.

Oncodostigma sp. (Voucher: Sankowsky 230 (BRI)) (Annonaceae). Tolga, Jan. 1984. A shrub or small tree found mostly in high altitude very wet rainforest from The Big Tableland to Mt Lewis but not on Mt Bartle Frere.

Polyalthia michaelii C.T. White (Annonaceae). Tolga, Dec. 1988. A large tree with very limited distribution, from Mt Bartle Frere to the South Johnston River.

Polyalthia sp. (Voucher: Sankowsky 292 (BRI)) (Annonaceae). Goldsborough Rd (Mulgrave River), Nov. 1982.

Pseuduvaria froggattii (F.Muell.) Jessup (Annonaceae). Tolga, Feb. 1984. A small tree occurring from the Bloomfield River to Black Mountain, near Kuranda.

Pseuduvaria hylandii Jessup (Annonaceae). Tolga, Feb. 1984. Tree to 10 m high in rainforest on Mt Bartle Frere and near Topaz.

Pseuduvaria mulgraveana Jessup var. *mulgraveana* (Annonaceae). Tolga, Dec. 1988. A small understory tree found in lowland rainforest between Bellenden Ker and the Mulgrave River valley.

Pseuduvaria mulgraveana Jessup var. *glabrescens* (Annonaceae). Clohesy River, Mar. 1983. A small tree found in the rainforest from Kuranda to Lake Tinaroo in the ranges and at Freshwater Creek, near Cairns. In the past this species has sometimes been called *Mitrephora froggattii* F. Muell.

Pseuduvaria villosa Jessup (Annonaceae). Glen Allyn, Nov. 1982. A small tree found in lowland rainforest between the Russell and South Johnston Rivers.

Rauwenhoffia leichhardtii (F.Muell.) Diels. (Annonaceae). Fitzroy Is., Aug. 1978. Ova and larvae found on the plant.

Uvaria goezeanus (F. Muell.) Jessup (Annonaceae). Tolga, Feb. 1984.

Uvaria membranacea Benth. (Annonaceae). Bloomfield, Dec. 1984.

Uvaria rufa Blume (Annonaceae). Tolga, Jan. 1985.

Xylopia sp. (Voucher: Sankowsky 284 (BRI)) (Annonaceae). Tolga, Dec. 1984. A small tree found in dry monsoonal rainforest north of Coen.

**Annona squamosa* L. (Annonaceae). Tolga, Mar. 1984. A small custard apple tree now naturalised in northern Queensland. Originally imported from South America.

**Annona cheromoya* Mill. (Annonaceae). Tolga, Mar. 1984. This is the most commonly used root stock used in the Tolga area for grafting of the various cultivated custard apples. It is rarely seen growing wild.

**Rollinia deliciosa* Safford (Annonaceae). Tolga, Dec. 1984. This is the most recent introduction from South America of the custard apple group

but already some wild plants can be found.

Graphium aristeus parmatum (Gray)

Miliusa brahei (F.Muell.) Jessup (Annonaceae). Tolga, Jan. 1988. Larvae were collected by Max and Barbara Moulds from near Coen on *Miliusa traceyi* Jessup. As the author had very little of this plant they were offered a range of Annonaceae and the only one they accepted without hesitation was *M. brahei*. *G. aristeus* is commonly seen just north of Cairns and as *M. traceyi* is not found this far south *M. brahei* could be the host plant in this area.

Eleppone anactus (W.S. Macleay)

Microcitrus inodora (F.M. Bailey) Swingle (Rutaceae). Tolga, Mar. 1983. A rare shrub found only on the lower eastern slopes of Mt Bellenden Ker.

Microcitrus garrawayae (F.M.Bailey) Swingle (Rutaceae). Tolga, Mar. 1983. A small tree found in dry monsoonal rainforest from Coen to Iron Range and across to Weipa.

**Poncirus trifoliata* (L.) Raf. (Rutaceae). Tolga, Apr. 1982. A small tree often used as a rootstock when grafting cultivated citrus.

Princeps aegeus aegeus (Donovan)

Flindersia ifflaiana F. Muell. (Rutaceae). Tolga, Dec. 1985. A large tree common in the rainforest north of Mareeba up to Cooktown, occurring again at Heathlands on Cape York Peninsula. Adults rarely oviposit on it but larvae readily accept it.

Flindersia laeviscarpa C.T. White and W.D. Francis (Rutaceae). Tolga, Mar. 1988. A small tree found in high altitude rainforest between Atherton and Mossman.

Flindersia oppositifolia (F. Muell.) T. Hartley and Jessup (Rutaceae). Tolga, Jan. 1987. A small tree found only on Mt Bartle Frere and Mt Bellenden Ker at high altitudes.

Flindersia pimenteliana F. Muell. (Rutaceae). Tolga, Jan. 1985. A common tree occurring in rainforest between Ingham and Cooktown, often at fairly high altitudes.

Melicope melanophloia C.T. White (Rutaceae). Tolga, Dec. 1987. A small tree with a very disjunct distribution, occurring in south-eastern Queensland and then again in northern Queensland.

Microcitrus garrawayae (F.M. Bailey) Swingle (Rutaceae). Tolga, Mar. 1983.

Microcitrus inodora (F.M. Bailey) Swingle (Rutaceae). Tolga, Mar. 1983.

Zanthoxylum nitidum (Roxb.) DC. (Rutaceae). Clohesy River, Mar. 1982. A large vine occurring in rainforests of northern Queensland.

Zanthoxylum veneficum F.M. Bailey (Rutaceae). Danbulla, Mar. 1983. A common tree in the rainforests of northern Queensland.

**Zanthoxylum ailanthoides* (Sieb.) Zupp. (Rutaceae). Tolga, Apr. 1983. A tree introduced from Japan.

Princeps fuscus capaneus (Westwood)

Bosistoa brassii T. Hartley var. *brassii* (Rutaceae). Tolga, Mar. 1986. A widespread tree found in rainforest from about Iron Range to Ingham.

Microcitrus garrawayae (F.M. Bailey) Swingle (Rutaceae). Tolga, Apr. 1983.

Microcitrus inodora (F.M. Bailey) Swingle (Rutaceae). Tolga, Apr. 1983.

Zanthoxylum nitidum (Roxb.) Dc. (Rutaceae). Clohesy River, Apr. 1983.

**Zanthoxylum ailanthoides* (Sieb.) Zupp. (Rutaceae). Tolga, Mar. 1983.

Princeps canopus canopus (Westwood)

Microcitrus garrawayae (F.M. Bailey) Swingle (Rutaceae). Tolga, Apr. 1984.

Microcitrus inodora (F.M. Bailey) Swingle (Rutaceae). Tolga, Apr. 1984.

Zanthoxylum nitidum (Roxb.) Dc. (Rutaceae). Clohesy River, Apr. 1984.

**Zanthoxylum ailanthoides* (Sieb.) Zupp. (Rutaceae). Tolga, Apr. 1984.

Princeps ambrax egipius (Miskin)

Microcitrus garrawayae (F.M. Bailey) Swingle (Rutaceae). Tolga, Mar. 1984.

Microcitrus inodora (F.M. Bailey) Swingle (Rutaceae). Tolga, Apr. 1983.

Zanthoxylum nitidum (Roxb.) Dc. (Rutaceae). Clohesy River, Apr. 1983.

**Zanthoxylum ailanthoides* (Sieb.) Zupp. (Rutaceae). Tolga, Mar. 1987.

Papilio ulysses joesa Butler

Acradenia euodiiformis (F. Muell.) T. Hartley (Rutaceae). Tolga, Mar. 1984. From south-eastern Queensland. *P. ulysses* oviposit readily on it at Tolga.

Euodia micrococca F. Muell. (Rutaceae). Tolga, Jan. 1982. A small tree found in rainforest of south-eastern Queensland and northern New South Wales.

Euodia sp. (Voucher: R.F.K./3921 (QRS)) (Rutaceae). Tolga, Mar. 1983. A small tree found only in very wet high altitude rainforest from Mt Lewis to Ravenshoe.

Euodia sp. (Voucher: Sankowsky 652 (BRI)) (Rutaceae). Tolga, Jan. 1987. A large tree found only in the McDowall and Thornton Ranges, (N of Daintree) extending down to the lowlands on the eastern slopes near Cape Tribulation.

Euodia sp. (Voucher: Sankowsky 894 (QRS)) (Rutaceae). Tolga, Mar. 1986. A shrub found only on Mt Lewis and the Windsor Tableland.

Euodia vitiflora F. Muell. (Rutaceae). Julatten, Jun. 1980. A large tree occurring in wet to very wet rainforest from Daintree southwards to northern New South Wales.

Evodiella muelleri (Engl.) B.L. Linden (Rutaceae). Tolga, Dec. 1983. A shrub or small tree occurring in rainforest from Cooktown to the Atherton Tableland. *P. ulysses* commonly oviposit on this plant.

Geijera paniculata (F. Muell.) Druce (Rutaceae). Tolga, Mar. 1987. A small tree found in dry rainforests in south-eastern Queensland.

Geijera salicifolia Schott. var. *latifolia* (Lindl.) Domin. (Rutaceae). Tolga, Feb. 1984. Occasionally ova are deposited on this plant in the author's garden, though none have been observed in the wild. It is a widespread plant in the rainforest but never common where *P. ulysses* is found.

Halfordia scleroxyla F. Muell. (Rutaceae). Tolga, Apr. 1984. A common tree in the wet to very wet rainforests of northern Queensland. Larvae have not been observed on this plant in the wild.

Cressida cressida cressida (Fabricius)

Aristolochia sp. (Voucher: Sankowsky 490 (BRI)) (Aristolochiaceae). Tolga, Jan. 1989. A small vine found on the edge of dry rainforest or in open forest from northern New South Wales to north of Gladstone. This is the only natural host plant of *C. cressida* in south-eastern Queensland. It has sometimes been identified incorrectly as *A. pubera* R.Br., which is found only in northern Queensland.

Aristolochia holtzei R.Br. (Aristolochiaceae). Tolga, Jan. 1989. A very small vine found in the Northern Territory and from Cape York Peninsula to about Dimbulah, W of Mareeba. As with all the small *Aristolochia* species there is usually not enough foliage on one plant to sustain a larva so they have to search for another vine after the current host has been devoured. *A. pubera* R.Br. is the only open forest *Aristolochia* that can support two or three larvae through to pupation.

Atrophaneura polydorus queenslandicus (Rothschild)

Aristolochia sp. (Voucher: Sankowsky 372 (BRI)) (Aristolochiaceae). Wooten Creek, Nov. 1984. A large vine found only from the western side of Mt Bartle Frere to the Johnston and Russell Rivers.

Aristolochia sp. (Voucher: Sankowsky 382 (BRI)) (Aristolochiaceae). Iron Range, Nov. 1986. A large vine found commonly in the rainforests of the Iron Range and Pascoe River areas.

Aristolochia sp. (Voucher: Sankowsky 368 (BRI)) (Aristolochiaceae). 50 km N of Heathlands on Cape York Peninsula, Oct. 1988. A small vine found commonly in open eucalypt and heath forests north of Iron Range. *A. polydorus* was laying freely on this vine in the open forest, at least 10 km from the nearest rainforest.

Ornithoptera euphorion (Gray)

Aristolochia sp. (Voucher: Sankowsky 372 (BRI)) (Aristolochiaceae). Mt Bartle Frere, Apr. 1982.

Aristolochia sp. (Voucher: Sankowsky 220 (BRI)) (Aristolochiaceae). Mt Lewis, Mar. 1982. A medium sized vine known only from Mt Lewis.

PIERIDAE

Catopsilia pyranthe crokera (W.S. Macleay)

Cassia sp. (Voucher: Sankowsky 450 (BRI)) (Caesalpiniaceae). Paluma Ra., Mar. 1983. A small tree which is so far known only to occur on the Paluma Range.

NYMPHALIDAE

Danaus affinis affinis (Fabricius)

Cynanchum ovalifolium Wight (Asclepiadaceae). Tolga, Mar. 1989. A small vine which occurs in monsoonal rainforest on Cape York Peninsula.

Tirumala hamata hamata (W.S. Macleay)

Cynanchum leptolepis (Benth.) Domin. (Asclepiadaceae). Tolga, Mar. 1989. A large vine that is very common in the monsoonal rainforests of

the Weipa area. The adults preferred to oviposit on this vine, even when their normal host plant, *Secamone elliptica* R.Br. (Sankowsky 1975) was nearby.

Heterostemma acuminatum Decne. (Asclepiadaceae). Tolga, Mar. 1989. A large vine occurring in monsoonal rainforest on Cape York Peninsula.

Euploea sylvester sylvester (Fabricius)

Gymnema pleiadenium F. Muell. (Asclepiadaceae). Forty Mile Scrub, Jan. 1982. A large vine occurring in vine thickets in the Mt Surprise area.

Gymnema geminatum R. Br. (Asclepiadaceae). Chillagoe, Feb. 1984. A very common vine in vine thickets in the Chillagoe area.

Polyura sempronius sempronius (Fabricius)

Adenanthra abrosperma F. Muell. (Mimosaceae). Chillagoe, Mar. 1984. A small tree occurring in dry open forest in northern Queensland.

Albizia retusa ssp. *retusa* Benth. (Mimosaceae). Tolga, Jan. 1985. A very large tree found at Iron Range.

Sp. A (Voucher: Sankowsky 901 (BRI)) (Mimosaceae). Tolga, Mar. 1989. A small tree found in vine thickets along the Pascoe River.

Paraserianthes toona (Bailey) I. Nielsen (Mimosaceae). Tolga, Mar. 1988. A large tree found in rainforests north of Mackay. Previously known as *Albizia toona* F.M. Bail.

Phaedyra shepherdii shepherdii (Moore)

Bombax ceiba var. *leiocarpum* A. Robyns (Bombacaceae). Tolga, Feb. 1989. A large deciduous tree found in monsoonal rainforests north of Cairns.

Celtis sp. aff. *C. timorensis* (Voucher: Sankowsky 814 (QRS)) (Ulmaceae). Tolga, Feb. 1989. A small tree found only at Shipton's Flat near Cooktown.

Cordia dichotoma G. Forster (Ehretiaceae). Tolga, Mar. 1989. A medium to large tree found in most types of rainforest from Cape York to Rockhampton.

Grewia papuana Burret (Tiliaceae). Yaramulla Station, Mar. 1989. A shrub common in vine thickets in the Mt Surprise area.

Yoma sabina parva (Butler)

Dipteracanthus bracteatus (R.Br.) Nees (Acanthaceae). 3 km S of Pascoe River crossing, Iron Range road, Dec. 1986. A small perennial herb found commonly in open forest, especially near the edge of vine thickets, on Cape York Peninsula.

Sp. B (Voucher: Sankowsky 477 (BRI)) (Acanthaceae). Tolga, Mar. 1988. A small trailing herb collected only from vine thickets on Big Mitchell Ck near Mareeba.

Junonia orithya albicincta Butler

Sp. C (Voucher: Sankowsky 334 (BRI)) (Acanthaceae). Chillagoe, Apr. 1984. A small herb to about 20 cm high and 50 cm wide found in vine thickets near Chillagoe.

Sp. D (Voucher: Sankowsky 802 (BR)) (Acanthaceae). Tolga, Dec. 1987. A perennial herb collected in vine thickets just south of Cooktown and near the mouth of the Claudie River.

Sp. E (Voucher: Sankowsky 803 (BRI)) (Acanthaceae). Tolga, Mar. 1988. A small herb collected from Mt Pinnacle near Dimbulah.

Hypoestes floribunda R. Br. (Acanthaceae). Tolga, Jan. 1987. A herb commonly found in gallery rainforest from Cape York to Coen.

Justicia sp. (Voucher: Sankowsky 285 (BRI)) (Acanthaceae). Tolga, Dec. 1985. A small herb common on creeks just north and south of the Pascoe River.

Psudeuranthemum sp. (Voucher: Sankowsky 245 (BRI)) (Acanthaceae). Scrubby Ck, S of Cooktown, Aug. 1982. A small clumping herb found in vine thickets from Cooktown to Lakeland Downs. It is interesting to note that neither *Doleschallia* nor *Hypolimnas* oviposit on this plant.

Rostellularia adscendens (R.Br.) R.M. Barker ssp. *glaucoviolacea* (Domin) R.M. Barker (Acanthaceae). Dimbulah, Mar. 1983. A small herb widespread in open eucalypt forests of northern Queensland.

Cethosia cydippe chrysippe (Fabricius)

Hollrungia sp. (Voucher: Sankowsky 762 (BRI)) (Passifloraceae). Cape Tribulation, Aug. 1978. A large vine found in wet rainforests north of the Clohesy River to about Cooktown.

Vindula arsinoe ada (M.R. Butler)

Hollrungia sp. (Voucher: Sankowsky 762 (BRI)) (Passifloraceae). Clohesy River, Mar. 1982.

Vagrans egista propinqua (Miskin)

Homalium alnifolium Thwaites and F. Muell. ex F. Muell. (Flacourtiaceae). Tolga, Feb. 1989. This species is not naturally found in northern Queensland as it occurs from about Rockhampton to Yarraman. *Vagrans* larvae can only eat soft new growth and the large bright red new growth of this species is much favoured.

Cupha prosope prosope (Fabricius)

Xylosma terraereginae C. White & Sleumer (Flacourtiaceae). Tolga, Feb. 1989. This shrub is naturally found only in southern Queensland and northern New South Wales and could be a host in this area.

Xylosma sp. nov. (Voucher: Sankowsky 284 (BRI)) (Flacourtiaceae). Tolga, Mar. 1987. This is a small and very rare tree found only on Mt Lewis in northern Queensland.

Flacourtia sp. nov. (Voucher: Sankowsky 262 (BRI)) (Flacourtiaceae). Tolga, Feb. 1986. A small tree found in dry to moist monsoonal rainforests north of Cooktown.

The adults do not oviposit on *Flacourtia territorialis* Airy Shaw from near Darwin, the host of *Phalanta phalantha araca*.

LYCAENIDAE

Hypochrysops ignitus chrysonotus Grose-Smith

Acacia flavescens Cunn. ex Benth. (Mimosaceae). Tolga, Mar. 1988. A small tree common in open forest, east of the Great Dividing Range, north of Bundaberg.

Grevillea baileyana McGillivray (Proteaceae). Tolga, Nov. 1988. A common tree in rainforest north of Tully.

Terminalia arenicola N. Byrnes (Combretaceae). Tolga, Mar. 1988. A tree that grows commonly on beaches in northern Queensland. One particular tree in the author's garden had larvae on it continuously for twelve months.

Deudorix epijarbas dido Waterhouse

Sarcopteryx martyana (F. Muell.) Radlk. (Sapindaceae). Lake Tinaroo, Dec. 1983. A small tree commonly found in rainforests from Mt Tozer to Hinchinbrook Island. The seeds were too small for the larvae to remain inside in the final instar and they were found at the base of the fruit when not feeding.

Anthene lycaenoides godeffroyi (Semper)

Cassia retusa Rovel (Caesalpiniaceae). Tolga, Dec. 1983. A small shrub found in dry rainforests from Cooktown to south-eastern Queensland. Larvae feed on the buds and flowers.

**Cassia auriculata* L. (Caesalpiniaceae). Tolga, Dec. 1981. A shrub or small tree from South East Asia, sometimes grown in gardens. Larvae feed on the buds and flowers.

Rhyssopterys timorensis (Blume) Juss. (Malpighiaceae). Tolga, Jan. 1984. A large vine found in dry rainforest from Weipa to Townsville. Larvae feed on the flowers and buds.

Jamides aleuas coelestis (Miskin)

Arytera pauciflora S. Reyn. (Sapindaceae). Mulgrave River, Jan. 1986. A small tree found in rainforest from Cooktown to Innisfail. Larvae feed only on the very soft new growth and mostly on juvenile plants up to 2 m high.

Zizula hylax attenuata (T.P. Lucas)

Hygrophila angustifolia R.Br. (Acanthaceae). Tolga, Mar. 1985. A small herb found only in and near swamps, usually in association with *Melaleuca* trees.

Notes and Discussion

The author has experimented with various *Passiflora* spp. as host plants for *Cethosia cydippe chrysippe*. If placed on *P. aurantia* G. Forster, *P. herbertiana* Ker Gawler and *P. foetida* L. var. *hispida* Killup the larvae will mature and pupate. In the first generation they are below average size, but by the third generation they are normal size. These plants are not natural hosts as *Cethosia cydippe chrysippe* never lays on them in the wild.

There are about four varieties (or species) in the *P. foetida* group. *Cethosia cydippe chrysippe* and *Vindula arsinoe ada* will only survive on the variety with orange fruit and lightly hairy leaves which usually grows near beaches in northern Queensland.

It has been reported that the larvae of *Vagrans egista propinqua* feed on *Xylosma ovatum* Benth. (Common & Waterhouse 1981) at Cairns. This is unlikely as this species grows only in central Queensland and is a host for *Cupha prosope prosope* not *Vagrans egista propinqua*. Adults do not oviposit nor do larvae feed on two northern Queensland species, *Homalium brachybotrys* (F.Muell.) F.Muell. and *Homalium* sp. (Voucher: Sankowsky 367 (BRI))

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